

REMARKS

Claims 1-5 and 15 are pending in this application. By this amendment, claims 1, 4, 5 and 15 are amended. Withdrawal of the rejections and allowance of these claim is respectfully requested.

Objection to the Drawings

The Examiner has objected to the drawings under 37 CFR 1.83(a). In particular, the Examiner states the “inner surface” must be shown or the features cancelled from the claims.

Applicants submit that at least FIG. 2 discloses the inner surface as represented by reference character “205”. Further, support for the inner surface 205 is adequately described in the specification, see for example page 5, line 7 – page 6, line 2. Reconsideration and withdrawal of the objection is respectfully requested.

Claim Rejections – 35 U.S.C. §112

Claims 1-5 and 15 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

By this Amendment, claims 1, 4, 5 and 15 have been amended to obviate the rejection. Withdrawal of the rejections is respectfully requested.

Claim Rejections – 35 U.S.C. §102 and 103

Claims 1, 3 and 5 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,856,279 to Durham et al. (“Durham”); claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over Durham in view of U.S. Patent No. 4,510,500 to Brune; claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Durham in view of U.S. Patent No. 6,573,876 to Maroko et al. (“Maroko”); and claim 15 was rejected under 35

U.S.C. §103(a) as being unpatentable over Durham in view of U.S. Patent No. 6,512,496 to Alexeff et al. (“Alexeff”). Applicants respectfully disagree and traverse these rejections for at least the following reasons.

Foremost, Applicants submit that claim 1 has been amended to include the features of “providing a signal connection for the at least one antenna element”, as recited in claim 15. Thus, all of the §103 rejections are moot except for those relating to claim 15, to which the Applicants now turn their attention.

Each of the claims of the present invention includes a plurality of support structures passing through portions of an inner surface and supporting and connecting the inner and outer surfaces, and providing a signal connection for the at least one antenna element. Neither Durham nor Alexeff discloses or suggests such support structures.

The Examiner admits that Durham does not disclose a plurality of support structures providing a signal connection point for at least one antenna element. The Examiner attempts to overcome this deficiency by arguing that Alexeff teaches a means for providing a signal connection through an antenna element. Applicants respectfully disagree.

Alexeff appears to disclose an inflatable antenna device 8 having an expandable shell 10 which defines a chamber 12, an elongated support structure 14 that generally follows a central axis 16, and a flexible metal loop antenna element 18 coupled to the expandable shell 10. The antenna element 18 appears to be indirectly coupled to the expandable shell 10 by a secondary support structure 20. The shell 10 is designed to expand rapidly from the central axis 16 causing the antenna element 18 to expand into a functional position (col. 4, lines 5-15). However, it is submitted that Alexeff does not disclose “a plurality of support structures” passing through

portions of the inner surface. Instead, Alexeff discloses a single support structure 14 with a flexible metal loop antenna element 18 coupled therewith.

Further, there is no motivation to combine the teaching of Alexeff with the teachings of Durham with any expectation of success without substantially destroying the principle operation of Alexeff. That is, one of ordinary skill in the art would not remove the cap 15 of Alexeff and dispose at least one antenna element on the outer surface (shell 10) without substantially destroying the structure of Alexeff. Accordingly, if the alleged modification or combination of prior art would destroy the teachings or change the principle of operation of the prior art, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

Further, nowhere in Alexeff is there any motivation to modify the disclosure of Durham in the manner asserted by the Examiner. In the absence of any motivation to do so, one of ordinary skill in the art would not have combined the references and then modified the resulting combination as asserted by the Examiner to obtain the claimed invention. Thus, it is respectfully requested that the rejections be withdrawn.

For at least these reasons, Applicants respectfully submit that Durham and Alexeff, individually or in combination, fail to disclose or render obvious the features recited in independent claims 1 and 15. Claims 2-4, which depend from independent claim 1, are likewise distinguished over the references for at least the reasons discussed, as well for the additional features they recite. Withdrawal of the rejections and allowance of the claims is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John E. Curtin at the telephone number of the undersigned below.

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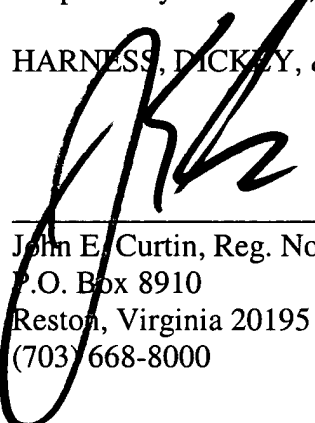
In the event this Response does not place the present application in condition for allowance, applicant requests the Examiner to contact the undersigned at (703) 668-8000 to schedule a personal interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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